

**EXHIBIT 1: STUDIES CITED OR MENTIONED IN OPPOSITION BY DEFENDANTS**

<b>Agency</b>	<b>Opp. Cite</b>	<b>Decl.</b>	<b>Study Cited?</b>	<b>Time (Study)</b>	<b>Population</b>	<b>Study Description</b>	<b>Study Defects<sup>1</sup></b> (N/A if not a study)
DOD	3, 26	Stanley ¶ 3	N	2020-2022	Service Members	“Ninety-six service members have died from COVID-19, and over 400,000 have contracted the disease.”  Does not provide any breakdown by time period of when deaths occurred, whether vaccines were available, the variant, etc.	1, 3, 5, 6
DOD	25, 31, 38	Stanley ¶¶ 3-13	N	2020-2021	Service Members	Historical overview of COVID impacts on readiness from 2020-2021:¶ 3 (summary statistics for 2020-8/22); ¶¶ 4-6 (Mar. 25, 2022 “60-day stop movement order”); ¶ 7 (March-April 2020 events); ¶ 8 (March 2020 COVID outbreak on <i>USS Theodore Roosevelt</i> ); ¶¶ 9-12 (summary of first “twenty months”); ¶ 13 (describing DOD assistance efforts from March 2020 and December 2021)	N/A
NIAID	21, 25	Stanley ¶ 16	N	10/21-12/21	All U.S.	For October-December 2021, “[r]ates of COVID-19 cases lowest among fully vaccinated persons with a booster dose compared to those with just the primary series, and much lower than among unvaccinated ...”	1-6
CDC	21, 25	Stanley ¶ 17	N	11/21-12/21	All U.S.	Describing CDC study results for November and December 2021 finding that in November 2021 “unvaccinated individuals were ... 15-times more likely to die than a fully vaccinated individual,” while in December 2021, they were “16 times more likely to be hospitalized ...”  Also provides comparison vaccine efficacy (VE) for fully vaccinated and boosted to fully vaccinated (two shots), as well as comparison of unvaccinated with previous infection and to fully vaccinated.	1-5
DOD	21, 25, 26	Stanley ¶18	N	7/21-11/21	Active-Duty Service Members	“[N]on-fully vaccinated active-duty service members “had a 14.6 fold increased risk of being hospitalized when compared to” fully vaccinated active-duty service members.	1, 3, 4, 6

<sup>1</sup> Study defects are identified consistent with those identified as numbers 1-6 in the Reply Brief, Section I at 2-3: (1) limitation to or inclusion of historical data from the 2020 and 2021 pre-Omicron, pre-vaccine phase; (2) analysis of general population, adults, etc., rather than service-members; (3) failure to disaggregate by age, weight/obesity, BMI, health or medical conditions (e.g., high blood pressure, diabetes, etc.) known to be significant risk factors; (4) no citations to study and cannot be verified or included in record; (5) includes or compares “boosters” to unvaccinated; and/or (6) no comparison for natural immunity or non-“vaccine” treatments.

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	21, 25	Stanley ¶18	N	7/21-11/21	All Adults	“[U]nvaccinated adults were 16-times more likely to be hospitalized than vaccinated adults,” while “unvaccinated adults over 50 years of age were 44 times more likely to be hospitalized than individuals who were vaccinated and received a booster dose.”	1-4, 6
DOD	21, 25	Stanley ¶18	N	2020-2022	Service Members	Stating that, “of the 96 deaths among uniformed service members, 92 were not fully vaccinated (another two were of unknown vaccination status, and the remaining two had not received the booster dose).”	1, 3, 4, 6
DOD		Stanley ¶19	N	7/20-7/22	Active-Duty Service Members	“[I]ncremental increase in protection against hospitalization going from the unvaccinated, to the partially vaccinated, to the fully vaccinated, to those who received a booster.” For active-duty service members “hospitalized during this two year window, 70% were not fully vaccinated (38% were unvaccinated, 32% were partially unvaccinated.” So 30% were fully-vaccinated despite fact that two-thirds of window was pre-Omicron and pre-vaccine mandates—and for the remaining one-third 98% of active-duty service members were fully vaccinated.	1, 3, 4, 6
CDC	21, 44	Stanley ¶21	Y	N/A	All Adults	Discussing CDC August 11, 2021 Guidance	N/A
FDA	25	Rans ¶ 8	Y	N/A	All U.S./ All “Eligible”	“Strongest recommendation for pre-exposure to COVID-19 disease remains vaccination...” Citation to FDA guidelines that all those “eligible” for vaccination should be vaccinated. FDA guidelines discuss monoclonal antibodies but emphasize that these treatments “are not a substitute for COVID-19 vaccination and should not be used in unvaccinated individuals for whom COVID-19 vaccination is recommended.”	N/A
GAO	3	Rans ¶ 9	Y	N/A	All U.S.	Discussion of GAO website discussing statistics and symptoms for “long COVID” but does not provide details on time period or population(s) studied or sampled; does not appear to address treatments.	N/A
Various Academic	3	Rans ¶ 9	Y	2022	Random Sample / All Adults	Academic long-term studies of “long COVID” symptoms.	N/A
	3, 31, 38	Rans ¶ 10	Y	1/21-10/21	All U.S. / Service Members	General discussion of COVID infection risks for service members and U.S. population	N/A
DOD	3, 25, 38	Rans ¶ 11	N	2020-2022	Active-Duty Service Members	Statistics on infections, hospitalizations and deaths for active-duty service members from February 2020-June 2022 showing no deaths since November 2021.	1, 3, 4, 6

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DOD	25, 26, 38	Rans ¶ 12	N	N/A	DOD Personnel	COVID statistics for DOD Personnel	N/A
DOD	38	Rans ¶ 13	N	2020-2022	Service Members & U.S. Adults	Overview of COVID effects on service members, military readiness, and U.S. population generally, the elderly and those with other risk factors with totals for infections, deaths, and hospitalizations over more than two-year period.	1, 3, 4, 6
DOD	28	Rans ¶ 14	N/A	N/A	DOD Personnel	Discussion of DOD vaccination statistics	N/A
DOD	12	Rans ¶ 19	N/A	N/A	N/A	Discussing offer of “Comirnaty-labeled” vaccine	N/A
DOD	32	Rans ¶ 20	N/A	N/A	N/A	Overview of DOD Immunization Program, including DODI 6205.02 and service regulations, including discussion of medical exemptions and COVID testing options.	N/A
CDC	32	Rans ¶¶ 21-22	N/A	N/A	N/A	Overview of CDC vaccination recommendations for all eligible population, CDC conclusions that “vaccination following infection further increases protection,” ( <i>i.e.</i> , recommends vaccination even if prior infection), and that testing “for prior infection is not recommended for the purpose of vaccine decision-making.” Does not provide, cite or summarize study results or other relevant evidence.	N/A
CDC	32	Rans ¶ 24	N/A	N/A	N/A	Discussion of diseases that do not provide long-standing natural immunity	N/A
Various	33	Rans ¶¶ 25-27	N/A	N/A	N/A	Discussing “herd immunity” – Plaintiffs have not raised herd immunity.	N/A
CDC	45	Rans ¶ 43	N/A	N/A	All U.S.	Discussing need for continued vaccination and providing current vaccination statistics	N/A
HHS	33	Rans ¶ 44	N/A	N/A	NA	Noting that HHS Secretary renewed public health emergency on April 12, 2022	N/A